ABSTRACT

A search was conducted for functional antibodies that endogenously regulate cytokines, focusing on the relationship between inflammatory diseases and cytokines.

Mice were immunized with a human peripheral blood monocyte fraction and the obtained antibodies were examined for a cytokine-regulating effect. As a result, of these antibodies, antibody #33 was confirmed to inhibit the production of numerous typical inflammatory cytokines. When, at the same time, the promoting effect of antibody #33 on IL-10 production was examined, it was revealed that antibody #33 has an effect of accelerating IL-10 production but no activity to induce an excessive IL-10 production. The antigen of this promising antibody was verified to be CD61. Therefore, it is conceivable that when anti-CD61 antibodies are applied to the treatment of inflammatory diseases, they would become pharmaceuticals with both a definite efficacy and a high safety.